

ModusToolbox™ run-time software release notes

ModusToolbox™ tools package version 3.3.0

About this document

Scope and purpose

With the ModusToolbox™ run-time software, you can rapidly develop applications for Infineon MCUs, as well as AIROC™ Wi-Fi and Bluetooth® devices.

This document lists the new and updated features included with this release of ModusToolbox™ run-time software. For details about these and other features and libraries, refer to the [ModusToolbox™ run-time software reference guide](#).

Document conventions

| Convention | Explanation |
|----------------------|---|
| Bold | Emphasizes heading levels, column headings, menus and sub-menus |
| <i>Italics</i> | Denotes file names and paths |
| Courier New | Denotes APIs, functions, interrupt handlers, events, data types, error handlers, file/folder names, directories, command line inputs, and code snippets |
| File > New | Indicates that a cascading sub-menu opens when you select a menu item |

Reference documents

Refer to the following links for more information:

- [ModusToolbox™ run-time software reference guide](#)
- [ModusToolbox™ software page on GitHub](#)
- [Code examples on GitHub](#)
- [ModusToolbox™ community webpage](#)



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What's new/changed in this release

1 What's new/changed in this release

The following features and libraries have been added/changed since the previous release:

1.1 Features

- RTOS 6G support for AIROC™ CYW5551x
- RTOS offloads support for AIROC™ CYW5551x
- Class B certification of PSOC™ 6 family
- Support for RT-Labs Industrial Communication stack on XMC7000
- Little-fs filesystem support on AIROC™ CYW20829
- OTA update performance improvements
- PSA Level 1 Certification of PSOC™ 62
- Enable Bluetooth® on the KIT_XMC72_EVK kit
- D-cache management for XMC7000 CEs

1.2 New libraries

- rtlabs-uphy-lib: v0.6.1

1.3 Updated libraries

- wifi-host-driver: v4.2.1
- wifi-core-freertos-lwip-mbedtls: v2.2.0
- secure-sockets: v3.9.0
- lwip-network-interface-integration: v1.5.0
- ota-bootloader-abstraction: v1.5.2
- ota-update: v4.3.3
- lwip-freertos-integration: v1.1.0
- aws-iot-device-sdk-port: v2.6.0
- ethernet-core-freertos-lwip-mbedtls: v2.3.0
- virtual-connectivity-manager: v1.0.4
- lpa: v5.7.0
- wpa3-external-supPLICANT: v1.2.2
- wifi-connection-manager: v3.6.1
- ethernet-connection-manager: v2.1.1
- mtb-pdl-cat1: v3.14.0
- cy-mbedtls-acceleration: v2.6.0
- cmsis: v5.8.2
- mtb-stl: v3.0.0
- mtb-littlefs: v2.1.0
- cat1cm0p: v1.8.0
- mtb-pdl-cat5: v2.0.0
- mtb-hal-cat5: v1.2.0
- mtb-hal-cat1: v2.6.2

What's new/changed in this release

- whd-bsp-integration: v2.3.1
- serial-flash: v1.4.3

1.4 Updated BSPs

- CY8CEVAL-062S2-CYW43022CUB: v5.0.0
- CY8CEVAL-062S2-LAI-43439M2: v5.0.0
- CY8CEVAL-062S2-LAI-4373M2: v5.0.0
- CY8CEVAL-062S2-MUR-43439M2: v5.0.0
- CY8CEVAL-062S2-MUR-4373EM2: v5.0.0
- CY8CEVAL-062S2-MUR-4373M2: v5.0.0
- CY8CKIT-062-WIFI-BT: v5.0.0
- CY8CKIT-062S2-43012: v5.0.0
- CY8CKIT-062S2-AI: v5.0.0
- CY8CKIT-064B0S2-4343W: v5.0.0
- CY8CKIT-064S0S2-4343W: v5.0.0
- CY8CPROTO-062-4343W: v5.0.0
- CY8CPROTO-062S2-43439: v5.0.0
- CY8CPROTO-062S3-4343W: v5.0.0
- CYSBSYSKIT-01: v5.0.0
- CYSBSYSKIT-DEV-01: v5.0.0
- CYW9P62S1-43012EVB-01: v5.0.0
- CYW9P62S1-43438EVB-01: v5.0.0
- KIT_XMC71_EVK_LITE_V1: v2.3.0
- KIT_XMC71_EVK_LITE_V2: v2.3.0
- KIT_XMC72_EVK: v2.3.0
- KIT_XMC72_EVK_MUR_43439M2: v2.3.0
- KIT_XMC7200_DC_V1: v2.3.0

1.5 New code examples

- mtb-example-uphy: v0.6.1
- mtb-example-ce240884-safety-dac-test: v1.0.0

1.6 Updated code examples

- mtb-example-btstack-freertos-battery-server: v6.0.0
- mtb-example-btstack-freertos-capsense-buttons-slider: v7.0.0
- mtb-example-btstack-freertos-cts-client: v5.2.0
- mtb-example-btstack-freertos-cts-server: v5.2.0
- mtb-example-btstack-freertos-ess: v5.2.0
- mtb-example-btstack-freertos-findme: v5.2.0
- mtb-example-btstack-freertos-hello-sensor: v4.2.0
- mtb-example-btstack-freertos-multi-beacon: v5.0.0
- mtb-example-btstack-freertos-peripheral-privacy: v5.1.0

What's new/changed in this release

- mtb-example-btstack-freertos-wifi-onboarding: v5.0.0
- mtb-example-ce239682-safety-communication-test: v1.2.0
- mtb-example-ce239717-safety-uart-loopback-test: v1.2.0
- mtb-example-ce239718-safety-core-test: v2.2.0
- mtb-example-ce239832-safety-spi-loopback-test: v1.1.0
- mtb-example-ce239833-safety-i2c-test: v1.1.0
- mtb-example-ce239999-safety-canfd-test: v1.1.0
- mtb-example-ce240063-safety-analog-test : v1.1.0
- mtb-example-ce240064-safety-tcpwm-test: v1.1.0
- mtb-example-ce240065-safety-stack-test-freertos: v1.1.0
- mtb-example-psoc4-safety-core-test: v1.0.0
- mtb-example-psoc4-safety-analog-test: v1.0.0
- mtb-example-psoc4-safety-i2c-test: v1.0.0
- mtb-example-psoc4-safety-spi-loopback-test: v1.0.0
- mtb-example-psoc4-safety-uart-loopback-test: v1.0.0
- mtb-example-psoc4-safety-communication-test: v1.0.0
- mtb-example-ethernet-ota-https: v2.1.0
- mtb-example-ethernet-ota-mqtt: v2.1.0
- mtb-example-ethernet-secure-tcp-client: v2.1.0
- mtb-example-ethernet-secure-tcp-server: v2.1.0
- mtb-example-ethernet-tcp-client: v2.1.0
- mtb-example-ethernet-tcp-server: v2.1.0
- mtb-example-ethernet-udp-client: v2.1.0
- mtb-example-ethernet-udp-server: v2.1.0
- mtb-example-hal-crypto-trng: v3.3.0
- mtb-example-mcuboot-basic: v7.4.0
- mtb-example-ml-gesture-classification: v3.2.1
- mtb-example-ml-profiler: v3.1.2
- mtb-example-ota-https: v6.4.0
- mtb-example-ota-mqtt: v7.5.0
- mtb-example-pdl-xmc7000-crypto-aes: v1.2.0
- mtb-example-pdl-xmc7000-crypto-sha: v2.1.0
- mtb-example-pdl-xmc7000-spi-master-dma: v2.2.0
- mtb-example-pdl-xmc7000-uart-transmit-receive-dma: v2.2.0
- mtb-example-psoc4-capsense-smartsense-buttons-slider: v2.0.0
- mtb-example-psoc4-dfu-basic: v2.1.0
- mtb-example-psoc6-dual-cpu-cyberon-freertos: v1.0.1
- mtb-example-psoc6-low-power-capsense-freertos: v2.2.1
- mtb-example-psoc6-power-measurements: v1.0.1
- mtb-example-serial-flash-readwrite: v3.5.0
- mtb-example-wifi-https-client: v1.5.0

What's new/changed in this release

- mtb-example-wifi-https-server: v4.7.0
- mtb-example-wifi-mqtt-client: v6.7.0
- mtb-example-wifi-scan: v4.9.0
- mtb-example-wifi-secure-tcp-client: v4.9.0
- mtb-example-wifi-secure-tcp-server: v4.9.0
- mtb-example-wifi-wps-enrollee: v3.9.0
- mtb-example-xmc-fce-crc: v2.2.1
- mtb-example-xmc-flash-bmi: v2.1.0
- mtb-example-xmc-flash-protection: v2.2.0
- mtb-example-xmc-posif-hall: v2.1.1
- mtb-example-xmc-posif-qd: v2.1.1
- mtb-example-xmc-spi-qspi-flash: v2.0.2
- mtb-example-xmc-tse-calc-temperature: v2.1.1
- mtb-example-xmc-uart-shell: v2.2.0
- mtb-example-xmc7000-adc-basic: v2.1.0
- mtb-example-xmc7000-multicore-ipc-pipes: v2.2.0
- mtb-example-xmc7000-oob-demo: v2.2.0
- mtb-example-xmc7000-otw-firmware-upgrade: v2.1.0
- mtb-tester-wifi-bluetooth: v2.4.0

1.7 Application Notes and KBAs

- AN236847 - PSOC™ 4 IEC 60730 Class B and IEC 61508 SIL safety software library for ModusToolbox™
- AN236282 - Device Firmware Update (DFU) middleware (MW) for ModusToolbox™

Known issues

2 Known issues

Problem: The KIT_XMC71_EVK_LITE_V1 kit is not compatible with the ARM toolchain.

Workaround: None. Will be fixed in the next release

Revision history

Revision history

| Revision | Date | Description |
|----------|------------|--|
| ** | 2020-04-30 | Initial Release. |
| *A | 2020-05-18 | Added BTSTACK issue. Added bluetooth-freertos btstack libraries. |
| *B | 2020-06-29 | Updated for version 1.1. |
| *C | 2020-08-30 | Removed sentence about BTSTACK supports Bluetooth BR/EDR and BLE core protocols. |
| *D | 2020-09-30 | Updated for version 1.2. |
| *E | 2020-12-20 | Updated for version 1.3. |
| *F | 2021-05-11 | Updated for version 1.4. |
| *G | 2021-05-24 | Updated for version 1.4.1. |
| *H | 2021-10-06 | Updated for version 1.5. |
| *I | 2021-12-15 | Updated for January 2022. |
| *J | 2022-04-01 | Updated for April 2022. |
| *K | 2022-08-05 | Updated for August 2022. |
| *L | 2022-10-19 | Updated for October 2022. |
| *M | 2022-12-20 | Updated for December 2022. |
| *N | 2023-03-31 | Updated for March 2023. |
| *O | 2023-06-30 | Updated for June 2023. |
| *P | 2023-09-25 | Updated for September 2023. |
| *Q | 2023-12-13 | Updated for December 2023. |
| *R | 2024-03-25 | Updated for March 2024. |
| *S | 2024-06-26 | Updated for June 2024. |
| *T | 2024-09-23 | Updated for September 2024. |
| *U | 2024-12-11 | Updated for December 2024. |

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